

19990323.ba v02_n474.bam.990323

>From ???@??? Wed Mar 24 06:09:16 1999
Message-Id: <199903240440.WAA23306@sco.theporch.com>
Date: Tue, 23 Mar 1999 22:40:07 CST
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2474

BOATANCHORS Digest 2474

Topics covered in this issue include:

- 1) TS-520S
by Jon Schmidt <schmidtj@ix.netcom.com>
- 2) Re: 50 yrs ago today (3/22/49) - Thanks to all
by AviDov@aol.com
- 3) [Hallicrafters] HCA Library
by "anthony w. deprato" <tdeprato@som-uky.campuscw.net>
- 4) Re: Modern Radio Labs
by Bill <billross@txdirect.net>
- 5) Re: 50 yrs ago today (3/22/49) - Thanks to all
by Dan Arney <kn6di@groupone.net>
- 6) Re: Receiver alignment
by Garey Barrell <k4oah@mindspring.com>
- 7) Exploding radios
by midshires@cix.co.uk (Andrew Emmerson)
- 8) Re: 50 yrs ago today (3/22/49) - Thanks to all
by Allan Stephens <modsteph@ACS.EKU.EDU>
- 9) Re: "The Prince of Darkness"
by Jderm740@aol.com
- 10) Johnson Ranger "Help" wanted
by "ROBERT F. KEMP" <rkemp@mr.net>
- 11) Precision Sig Gen Info
by "Don Ehrlich" <ehrlich@olypen.com>
- 12) Re: "The Prince of Darkness"
by Richard Loken <richardlo@devax.admin.athabascau.ca>
- 13) VLF REGEN RCVR
by N5CM@aol.com
- 14) Tube Checkers Parts.
by N5CM@aol.com
- 15) Knob removal
by MIKHAEL_BROWN@HP-PaloAlto-om24.om.hp.com
- 16) Re: Knob removal
by Joe Eide <jeide@execpc.com>
- 17) Re: VLF REGEN RCVR
by Dave Jordan <wa3gin@erols.com>
- 18) Wanted: National HRO Doghouse Supply

- by David Stinson <arc5@ix.netcom.com>
- 19) FS: More Mackay Gear
by Sandy W5TVW <ebjr@worldnet.att.net>
 - 20) BOONTON 260 TIPS
by JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
 - 21) Need HP 412-A meter info
by "Tom Bridgers" <tarheel6@email.msn.com>
 - 22) Collins 30L-1 manual online
by kf4kl@ipass.net (Doug Hall)
 - 23) Eutectic Solder
by "Barry L. Ornitz" <ornitz@tricon.net>
 - 24) Re: BOONTON 260 TIPS
by Arden Allen <gumbear@pacbell.net>
 - 25) Re: Knob removal
by Arden Allen <gumbear@pacbell.net>
 - 26) Re: Need HP 412-A meter info
by Arden Allen <gumbear@pacbell.net>

Message-ID: <36F723A2.861AF51D@ix.netcom.com>
Date: Mon, 22 Mar 1999 21:16:19 -0800
From: Jon Schmidt <schmidtj@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: TS-520S
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Lane,

I have the TS-520S operating manual and would be glad to copy it for you.
Is this the manual you need?

God Bless!

Jon WD8JSA

From: AviDov@aol.com
Message-ID: <ef8131f9.36f7460d@aol.com>
Date: Tue, 23 Mar 1999 02:43:09 EST
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Subject: Re:50 yrs ago today (3/22/49) - Thanks to all
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

The members of this group have outstanding memory cells ! Within a few hours I

have

received almost twenty responses. Ninety percent agree that the detonators were part of either the BC-645 or APX-4 or APX-6 IFF sets, and no one was injured. Two respondents, perhaps too young to recall such a possibility, declared it a hoax.

I take my hat off to all those who exemplify the high caliber of our membership and make it a real privilege to enjoy the benefit of their valuable expertise, offered so often and so generously. 73

Message-Id: <3.0.5.32.19990323073412.00879c70@mail.som-uky.campuscw.net>
Date: Tue, 23 Mar 1999 07:34:12 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: "anthony w. deprato" <tdeprato@som-uky.campuscw.net>
Subject: [Hallicrafters] HCA Library
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>To: hallicrafters@qth.net
>From: "anthony w. deprato" <tdeprato@som-uky.campuscw.net>
>Subject: [Hallicrafters] HCA Library
>Reply-To: "anthony w. deprato" <tdeprato@som-uky.campuscw.net>
>
>ok boys and girls I agreed to do this and i am in the process of listing
>all my personal manuals and copying them. Mr. Scott is doing the same. so
>here is the deal
>We want each of you to list what you have and send to me. I will send you
>back a list of what we need in the Library. if you want to sell "CHEAP" i
>will buy and add to the library if you want to donate Thank you for ever
>and a day. If you will make a couple very good copies and send to the
>Library everyone will be grateful. Boys and Girls this is your
>Hallicrafters Library what is in it is up to you. NM9N has the website up
>and when we get enough to list the library contents will be there along
>with tech tips from the field. "maybe someone has figured out why my sx
>101a is picking up cbers and 40 meter stations both on the 40 mt band.. "
>I have given up on ebay trying to buy manuals for the library i just can not
>afford 20 and 30 dollars for each one. this is your chance to have a source
>for info on hallicrafters and maybe other BA'S BUT it is up to you
>I await your reply's and the stuffing of the mail box.
>HALLICRAFTERS COLLECTORS ASSOC. LIBRARY
>P.O. BOX 146
>FERGUSON KENTUCKY 42533
>
>thanks Tony WA4JQS / VP8BZL
>SSIDXG

>HCA

Message-ID: <36F78BAD.30CC880D@txdirect.net>
Date: Tue, 23 Mar 1999 06:40:13 -0600
From: Bill <billross@txdirect.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Modern Radio Labs
Content-Type: text/plain; charset=koi8-r
Content-Transfer-Encoding: 7bit

Jderm740@aol.com wrote:

>
> Hi Bobbi et all
> Thanks for informing me of the history of Modern but everything you said only
> reinforces my original thoughts.
> Im afraid Mr. Nelson has his work cut out for him and he is going to need the
> services of a copyright attorney, at least.
> He might be better off to make a subtle change in his company name and still
> reference the old name to provide continuity. Such as: THE NEW IMPROVED MODERN
> RADIO LABS. Paul Nelson, SOLE PROPRIETOR. Copyright xx/xx/xxxx

Many of the larger cities (San Antonio for one) have targetted flea market sales for evidence of copyright/trademark infringement and will confiscate suspected materials on the spot while citing the seller. Perhaps Mr. Nelson should begin there. In any event, I agree that he has a problem that probably will require the services of an informed attorney.

Bill Ross

Message-ID: <36F791B8.7167F969@groupone.net>
Date: Tue, 23 Mar 1999 05:06:00 -0800
From: Dan Arney <kn6di@groupone.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: 50 yrs ago today (3/22/49) - Thanks to all
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang, In the early 50's (long ago) I worked as a field tech rep for Land-Air Corp. traveling all over the East coast & Bermuda removing

APX-4 and installing APX-6's in USAF aircraft. We buzzed the detonator circuits out and safety wired the red destruct sw. along with securing the amphenol connector to the adjacent mounting bulkhead on all of the planes except the SAC planes which after we sold the installation to the USAF they would arm the unit only when it was flying on a mission outside of the US. We saw the results of one that got fired at Pinecastle AFB in a B-47. It was in the avionics dept. as an example of what not to play with. It was a true candidate for Class 26. We also installed some other fancy little BLACK boxes in some of the SAC planes, and did a mod. on the K-1 bombsight to upgrade it to better tracking to release point for a more accurate ground zero. Like big deal since ground zero for the devices it was sending on its way was around 10 to 15 miles. Sure did not make any difference which side of the tracks it was on when it let go. Sure did look good at the RBS sites though. When the crew hit the RBS trailer they sure had big egos as crew of the day/week/month or quarter.

Hank

Message-Id: <3.0.1.32.19990323092214.00692f88@pop.mindspring.com>

Date: Tue, 23 Mar 1999 09:22:14 -0500

To: Old Tube Radios <boatanchors@theporch.com>

From: Garey Barrell <k4oah@mindspring.com>

Subject: Re: Receiver alignment

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

At 12:22 AM 3/23/99 -0500, you wrote:

>True enough John... he couldn't do the lower IFs-you're absolutely
>correct-my bad!... it's a fine old sig gen but wouldn't do for Drakes... I
>forgot about that lower end being so (relatively) high. But he can ask the
>guy I recommended (or whoever he picks to buy from) about it, and
>specifically point out the need for a 50kHz signal. I think even my HP 8640B
>doesn't go that low-in fact... my BC-221s don't go that low. On the other

I think what you guys are hitting all around is the HP 606A/B generator. It covers from 50 kHz to 65 MHz. It's a great generator for HF work, has a terrific attenuator, (if someone hasn't inadvertantly used it as a dummy load,) and is plenty stable. It's bigger and heavier and hotter than the 8640B, but has no phase noise and is about 1/10 the cost. The "B" has provisions for the external phase lock box, but the basic unit is more stable than the receivers we work on so not a problem. The dial is more than accurate enough, for those who remember analog dials and how to interpolate!! Just watch out for crispy crittered attenuators...

73,

Garey - K40AH

k4oah@mindspring.com
Atlanta

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Tue, 23 Mar 1999 15:42 +0000 (GMT Standard Time)
From: midshires@cix.co.uk (Andrew Emmerson)
Subject: Exploding radios
To: Old Tube Radios <boatanchors@theporch.com>
CC: midshires@cix.co.uk
Message-Id: <memo.19990323154219.53337B@midshires.compulink.co.uk>

Similar stories are told in Europe. German military radio and radar equipment made during World War II was sometimes fitted with explosive charges. These were intended to destroy the equipment in the case of accident (impact) or capture by the enemy (tampering). In recent years at least one collector has seen his garden shed go up with a bang (spontaneous detonation) and another, to his horror, had an innocent-looking 'component' identified as a charge. Frequently these detonators look extremely similar in shape and size to electrolytic capacitors and issue 117 (1998) of Funkgeschichte, the German historical wireless society's magazine, has photographs which illustrate this similarity well. It also quotes a newspaper report of 1949 in which a domestic radio technician testing war-surplus radio components for re-use lost his sight when one of these 'capacitors' blew up in his face.

Andrew Emmerson G8PTH/G9BUP

Date: Tue, 23 Mar 1999 11:31:07 -0500
From: Allan Stephens <modsteph@ACS.EKU.EDU>
Subject: Re: 50 yrs ago today (3/22/49) - Thanks to all
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Message-id: <36F7C1CB.F49BB791@acs.eku.edu>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

Hank wrote: and did a mod. on the K-1 bombsight to upgrade it to better tracking to release point for a more accurate ground zero. Like big deal since

> ground zero for the devices it was sending on its way was around 10 to
> 15 miles. Sure did not make any difference which side of the tracks it

> was on when it let go.
> Hank

You are overlooking a major reason for minimum CEP (circular error probability): greater accuracy, smaller payload. If you can drop it down the enemy's chimney you can zap him with a hand grenade. If your CEP is a half-mile, then you have to dig a hole a mile wide to be sure of getting what you are aiming for - NOT good for continued existence of the world.

Our CEP's were VERY good (and I assume still are) - and I cannot tell you how good - classified - but at the time when many were voicing great concern that the Soviets were mounting much larger warheads than ours, they missed the point that we did not NEED larger, since our aim was much better.

And at one time a standard target for SAC bombers when they were in training (simulated attacks on US cities) would be not a particular city in general, but maybe a mailbox on a particular corner in a particular city. And that was about thirty years ago...

73, Al N5AIT
former Missile Combat Crew Commander, 10th Strategic Missile Squadron
(Minuteman Modernized)
... in another life....

From: Jderm740@aol.com
Message-ID: <cec05a1b.36f80538@aol.com>
Date: Tue, 23 Mar 1999 16:18:48 EST
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Subject: Re: "The Prince of Darkness"
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Boy-O-Boy do Iever remember working on those Lucas systems in the 1950s. They would never use any kind of terminal block, preferring to stuff two, three or more wires under a screw on the voltage regulator. If you screwed the terminal screw tight enough to hold the wires, you usually stripped the threads or cracked the bakelite body. If you didn't tighten the screw enough, the wires started coming loose forty miles down the road. And then there were the fuses. Little ceramic do-dads with fuse strips wrapped around them. Exposed to the elements and all the crap from the road. Road salt in winter loved these things. Ate them for lunch. But there was one bright spot in the Lucas catalog. The FLAMETHROWER driving light. This thing was about 7 or 8" in dia

and threw a ball of light that could burn a hole in a telephone pole at a quarter mile. When you turned it on you missed nothing. If it was out there, you saw it. And if another driver came at you and wouldn't "dip" (English, don't you know) his high beams, you turned this light on and the other driver never drove again. They don't give licenses to blind people. One of the guys in our bunch had a 1950 Ford. And if anybody remembers, the grille of the Ford had a spinner like centerpiece. This fellow removed the "spinner" and replaced it with one of these flamethrowers. Boy did he get attention and respect. If you think these halogen lights are something, they have NOTHING on the flamethrower.

Jack

Message-ID: <36F826C4.7BDC@mr.net>
Date: Tue, 23 Mar 1999 15:41:56 -0800
From: "ROBERT F. KEMP" <rkemp@mr.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Johnson Ranger "Help" wanted
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I got ahold of a one of these little rigs.
It appears that the keying mod and bias rectifier (deck) is not installed and that maybe this was quite an old unit without either mod. I have a schematic showing a unit with the mod but not without and am wondering where the modulator picked up the bias voltage from AND, could someone supply me a copy of the schematic or fax me one of the original diagrams!?? Fax at 651-345-2707.
I'm hoping I'm not missing this whole sub-assembly entirely!!!
Bob.

Message-ID: <000f01be7577\$c9f3aae0\$3ccfeed0@ehrllich>
From: "Don Ehrlich" <ehrllich@olypen.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Precision Sig Gen Info
Date: Tue, 23 Mar 1999 13:54:19 -0800
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have a Precision audio oscillator Model E-310 and need a schematic to be able to work on it. Anybody out there have the manual or other info on this thing?

Also need manual for a Knight Kit RF signal generator KG650 which covers 160 KHz to 112 MHz.

The House In Wren Wood ... Don and Judith Ehrlich

Date: Tue, 23 Mar 1999 15:14:03 -0700 (MST)
From: Richard Loken <richardlo@devax.admin.athabascau.ca>
Subject: Re: "The Prince of Darkness"
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Message-id:
<Pine.PMDF.3.95.990323150939.5411114492D-1000000@devax.admin.athabascau.ca>
MIME-version: 1.0
Content-type: TEXT/PLAIN; charset=US-ASCII

On Tue, 23 Mar 1999 Jderm740@aol.com wrote:

> fuses. Little ceramic do-dads with fuse strips wrapped around them. Exposed to
> the elements and all the crap from the road. Road salt in winter loved these

My 64 MGB had glass 3AG fuses... Two of them. Far as I know they were the only fuses in the car. My 82 Volvo had the little ceramic thingees 20 or so of them beside the driver's left leg, never gave any trouble.

> quarter mile. When you turned it on you missed nothing. If it was out there,
> you saw it. And if another driver came at you and wouldn't "dip" (English,
> don't you know) his high beams, you turned this light on and the other driver

They have main beams and dipped beams so maybe you can dip the main beams but not the high beams. We need an interpreter to get this right.

Richard Loken VE6BSV, Systems Programmer - VMS
Athabasca University
Athabasca, Alberta Canada
** richardlo@admin.athabascau.ca **

From: N5CM@aol.com
Message-ID: <46fff52b.36f81861@aol.com>
Date: Tue, 23 Mar 1999 17:40:33 EST
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Subject: VLF REGEN RCVR
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

To the member who advertised a Mackay VLF Regen rcvr.

If not already sold, please repeat offer to me direct. I accidentally erased your message.

Thanks, Ken....N5CM....

From: N5CM@aol.com
Message-ID: <d9f19ff5.36f81add@aol.com>
Date: Tue, 23 Mar 1999 17:51:09 EST
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Subject: Tube Checkers Parts.
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Hi Gang,

I am dismanteling the following for parts:

Hickok 532 Tube Checker - pwr transformer burned out.

TV-10B/U Checker - partly cannibalized - meter appears excellent

Have 1 good manual: ELECTRON TUBE TEST SET TV-10U \$10 + ship.
(It has complete data plus settings for checking tubes.)

73, Ken....N5CM....

From: MIKHAEL_BROWN@HP-PaloAlto-om24.om.hp.com
Date: Tue, 23 Mar 1999 15:50:23 -0800
Message-Id: <H00011050e346777@MHS>
Subject: Knob removal
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Content-Type: multipart/mixed; boundary="openmail-part-13630503-00000001"

--openmail-part-13630503-00000001
Content-Type: text/plain; charset=US-ASCII; name="BDY.TXT"
Content-Disposition: inline; filename="BDY.TXT"
Content-Transfer-Encoding: 7bit

I have an R-388 and several of the knob have had the hex part of the hex

screw stripped out. The hex driver just spins inside and the next size up is too big. Any ideas as what to try next?

--

Mikhael Brown <mikhael_brown@hp.com>

--openmail-part-13630503-00000001--

Date: Tue, 23 Mar 1999 18:07:22 -0600
From: Joe Eide <jeide@execpc.com>
Subject: Re: Knob removal
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Message-id: <36F82CBA.D7B609BE@execpc.com>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

Mikhael,

They are NOT hex set screws! They are Multi Spline (Bristol) wrenches. I'm sure that someone here can tell you where to get a small set reasonably. I know that last time I got a small set at the local electronics house that they were available under the GC brand name for under \$10. You can also get a top shelf set from Xelite for around ~\$40.

Good luck!

Joe - KB9R

Message-ID: <36F837E7.ACD1AAF0@erols.com>
Date: Tue, 23 Mar 1999 19:55:03 -0500
From: Dave Jordan <wa3gin@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: VLF REGEN RCVR
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Regarding LF receivers...can someone tell me what a BC779 is all about. A friend has one that works great. What's something like that worth?

thanks,
dave

=====

N5CM@aol.com wrote:

> To the member who advertised a Mackay VLF Regen rcvr.
>
> If not already sold, please repeat offer to me direct. I accidentally
> erased your message.
>
> Thanks, Ken....N5CM....

Message-ID: <36F83C20.A4C10386@ix.netcom.com>
Date: Tue, 23 Mar 1999 19:13:04 -0600
From: David Stinson <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Wanted: National HRO Doghouse Supply
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Wanted to buy or will trade:
Need a National HRO "doghouse" supply for the HRO Sr.,
2.5 volt version.

73 Dave Stinson AB5S
arc5@ix.netcom.com

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: FS: More Mackay Gear
Message-Id: <19990324021113.GY0F943@LOCALNAME>
Date: Wed, 24 Mar 1999 02:11:13 +0000

More true "boat anchors". The following has been in storage for the past few years and appears in good shape. It is "as shipped" from the factory in Raleigh, NC but was never used.

Mackay Model 2012 MF transmitter. 400-515 Khz. rated 500 watts out.
Uses a pair of 813's in final stage. RF deck only, no power supply...

Mackay Model 2021 HF transmitter. CW, 2-24 Mhz. Rated 500 watts output. Uses a pair of 813's in final stage. Crystal control or external exciter unit. Will match a wide range of output impedance antennas.

RF deck only, no power supply...

Mackay model MR-337-32A synthesized exciter unit. Can be used alone or with 2021 transmitter above.

Also have a manual antenna switch, autoalarm receiver, emergency transmitter.

Interested parties please e-mail me direct. Owner (not me, I just know the gear and am "brokering" it!) is accepting offers on the above. I have some digital pictures of the geara for those interested in looking at it.

73,
Sandy W5TVW

MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit
Date: Tue, 23 Mar 1999 21:12:12 -0500 (EST)
Subject: BOONTON 260 TIPS
To: Old Tube Radios <boatanchors@theporch.com>
From: JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
Message-ID: <9903232112.aa10909@pcusa01.ecunet.org>

To: boatanchors@theporch.com

As usual Hank, thanks for the tips.

What is eutectic solder?

-John Sehring (Tue, Mar 23, 1999 @ Custer SD USA) UCC WB2EQG
(temporarily at Midwestern Regional Medical Center, Zion IL)

From: "Tom Bridgers" <tarheel6@email.msn.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Need HP 412-A meter info
Date: Tue, 23 Mar 1999 21:46:21 -0500
Message-ID: <0eeba4046021839CPIMSSMTPU02@email.msn.com>

Have a HP 412-A with a dead meter. However, judging from the output at the rear of the unit, it otherwise appears to be functioning just fine. Does anyone happen to have a replacement meter for sale or know the uA full scale of the movement so I can find a work-a-like meter? (One of our list members might be able to help me ... if I can find out what the uA full scale is.) On the meter face, at the bottom I can see the following in very small type: "1120 0305" and beneath that "58M E-119 1-10-64." The size of this meter is

4 9/16" high by 5 11/16" wide.

It has 3 scales: the top two are Volt and Milliamp scales with the first going from 0 to 1 and the second 0 to 3. Both are linear. The third scale is for Ohms and goes from 0 to infinity, with 50 just to the left of infinity.

thanks in advance for your help,
-tom KE4RHH

From: kf4kl@ipass.net (Doug Hall)
To: Old Tube Radios <boatanchors@theporch.com>
Cc: boatanchors@listserv.tempe.gov
Subject: Collins 30L-1 manual online
Date: Wed, 24 Mar 1999 03:41:28 GMT
Message-ID: <36fa5e53.203277423@DOUGHALL>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: quoted-printable

Hi folks,

I have scanned the Collins 30L-1 manual and converted it to an Adobe Portable Document Format (PDF) file. I also scanned the schematic onto four sheets and combined them into a PDF file. If you need a 30L-1 manual (or if you'd like a decent copy to work with so you won't spill coffee or beer or Diet Pepsi on your original) download these files and print them out. You can download the 30L-1 manual and schematic files from

<http://www.ipass.net/~kf4kl>

You'll need the Adobe Acrobat viewer to view or print these files. It's available free from <http://www.adobe.com>

The manual itself is 1.7 MB, while the schematic is 144 KB. Email me if you have any questions or problems.

Enjoy,

Doug Hall, KF4KL

Message-Id: <199903240430.XAA01713@flash.naxs.net>
From: "Barry L. Ornitz" <ornitz@tricon.net>

To: Old Tube Radios <boatanchors@theporch.com>
Subject: Eutectic Solder
Date: Tue, 23 Mar 1999 23:29:07 -0500

John,

The word eutectic applies to solid-liquid systems exactly as the term azeotrope applies to liquid-vapor systems. The normal eutectic solder is a minimum melting eutectic, typically 63+ACU-tin - 37+ACU- lead. Other versions are available with different constituents. A minimum melting eutectic has a melting point below any of its constituents. Maximum melting eutectics are also available in certain alloys.

One interesting eutectic alloy is Wood's metal (50+ACU- Bismuth, 25+ACU- Lead, and 12.5+ACU- each of Tin and Cadmium). It melts at 65 C (149 F), well below the boiling point of water. It was always fun to mold a spoon out of this alloy and give it to someone to stir hot coffee - only to have the spoon melt(+ACo-). Many other bismuth alloys also have exceptionally low melting points such as bismuth solder (40+ACU- Bismuth, 40+ACU- Lead, and 20+ACU- Tin) which melts at 111 C (232 F).

The table below gives some melting point comparisons.

Wood's Metal	65 C
Bismuth Solder	111 C
Lead	327 C
Tin	232 C
Bismuth Metal	271 C
Cadmium	321 C

(+ACo-) Don't let them drink the coffee afterwards because it has been contaminated with lead, cadmium, and bismuth.

73, Barry L. Ornitz WA4VZQ ornitz+AEA-tricon.net

Date: Tue, 23 Mar 1999 20:33:13 -0800
From: Arden Allen <gumbear@pacbell.net>
Subject: Re: BOONTON 260 TIPS
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0F93004WB0LT2I@mta2.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 8BIT

> What is eutectic solder?

According to my magic Microsoft Books it means:

eu Σ tec Σ tic (y $^{\circ}$ -tĚkntÓk) adjective

1. Of, relating to, or formed at the lowest possible temperature of solidification for any mixture of specified constituents. Used especially of an alloy whose melting point is lower than that of any other alloy composed of the same constituents in different proportions.
2. Exhibiting the constitution or properties of such a solid.

noun

1. A eutectic mixture, solution, or alloy.
2. The eutectic temperature.

Sounds good to me but "eutectic" solder has the property of having essentially zero *plastic* state, i.e., as the molten metal cools solidification occurs instantly instead of going through a temperature range where the alloy is neither liquid or solid, as I understand it. 63/37 is the ratio for eutectic tin/lead solder. I have not noticed any difference in behavior between 60/40 and 63/37 solder for ordinary electronic soldering of wires to terminals, etc. Maybe there is a solder expert on the list who can expand on the merits of eutectic solder as it applies to soldering in electronics.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Date: Tue, 23 Mar 1999 20:34:48 -0800
From: Arden Allen <gumbear@pacbell.net>
Subject: Re: Knob removal
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0F930041Q00HW8@mta2.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

Mikhael's dilemma:

> I have an R-388 and several of the knob have had the hex part of the hex
> screw stripped out. The hex driver just spins inside and the next size up is
> too big. Any ideas as what to try next?

Flush the set screw(s) out with a good de-greasing solvent. Cement an allen hex key wrench or bristo key wrench into the screw using a good epoxy. After the cement has cured apply a penetrant and allow to soak in. When you go to unscrew the set screw be prepared for failure. It's always

worked for me but I just do things like that on my lucky days.....yuk, yuk.
Good luck.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Date: Tue, 23 Mar 1999 20:40:37 -0800
From: Arden Allen <gumbear@pacbell.net>
Subject: Re: Need HP 412-A meter info
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0F93004UL0Y4W8@mta2.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

Hi Tom;

> Does anyone happen to have a replacement meter for sale or know the
uA full scale
> of the movement so I can find a work-a-like meter?

The meter on my 412A has the inscription "FSA=.001". It's a 1mA full scale
meter. Are you sure the meter movement is bad? Maybe it is repairable if
bad.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

End of BOATANCHORS Digest 2474
